

XP-002294158

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AN - 1994-269563 [33]

A - [001] 017 03& 034 041 046 050 06- 07& 07- 08& 08- 09& 09- 10& 10- 15-
17& 17- 18& 18- 19& 19- 20& 20- 229 26- 308 309 310 318 342 42- 44&
441 456 476 51& 53& 532 533 534 535 575 592 593 597 603 654 688 721
722 723

AP - JP19930001405 19930107; [Previous Publ. JP6200074]; JP19930001405
19930107

CPY - MATU

DC - A17 E11

DR - 1508-U 1531-U 1544-U 1694-U 1966-U 5099-U 5214-U

FS - CPI

IC - C08J5/00 ; C08J5/06 ; C08J7/04 ; C08K9/04 ; C08L101/00

KS - 0011 0069 0072 0075 0078 0105 0108 0111 0114 0117 0120 0123 0126 0129
0132 0135 0138 0141 0144 0147 0150 0153 0165 0168 0171 0192 0205 0211
0220 0224 0228 0248 0249 2212 2214 2215 2216 2218 2220 2280 2459 2545
2569 2649 2651 2662 3249 3251

MC - A08-R01 A08-S08 E05-E02D

M3 - [01] B414 B720 B741 B742 B743 B744 B751 B752 B831 B832 C017 H581 H6
H601 H609 H684 H685 H689 J011 J271 M210 M211 M212 M250 M280 M281 M282
M283 M311 M312 M313 M314 M315 M316 M321 M332 M342 M344 M349 M361 M362
M391 M392 M411 M510 M520 M530 M540 M620 M781 M903 M904 N153 Q130 R043;
9433-E0201-U

PA - (MATU) MATSUSHITA DENKI SANGYO KK

PN - JP3292213B2 B2 20020617 DW200242 C08L101/00 008pp

- JP6200074 A 19940719 DW199433 C08K9/04 008pp

PR - JP19930001405 19930107

XA - C1994-123332

XIC - C08J-005/00 ; C08J-005/06 ; C08J-007/04 ; C08K-009/04 ; C08L-101/00

AB - J06200074 The composition comprises a polymer matrix resin and a
filler. The surface of the filler, which exists at least on the
surface of the polymer composition, is covered with a fluorocarbon
chemically absorbing membrane (FCAM).

- The surface of the polymer compsn. is pref. covered with FCAM. The
filler covered with FCAM is dispersed in the polymer compsn.. The FCAM
is a monomolecular membrane, monomolecular cumulative membrane or
polymer membrane. The filler is at least one of inorganic particles
selected from SiO₂, TiO₂, Al₂O₃, SnO, Cu, and ferrite, whiskers and
glass fibres. The FCAM is a fluorinated alkyl chemically absorbing
membrane.

- The matrix resin is e.g. polypropylene resin (PP). The filler is e.g.
SiO₂ fine particles with an average particle dia. of 1 micron. One of
the FCAM (FCAM-1) is prepd. by mixing heptadecafluorodecyltrichloros
ilane (HDTSC) with cyclohexane.

- ADVANTAGE - The compsn. has a high water repellency and oil repellency.

- In an example, 100 g of the SiO₂ fine particles was mixed with 200 ml
of 1 vol.% HDTSC soln. in cyclohexane, subjected to an ultrasonic
vibration for 10 mins., left to stand for 50 mins., decanted to remove
solvent, washed with cyclohexane and filtered to give 20 g of FCAM-1
covered SiO₂ fine particles. The SiO₂ fine particles were blended with
100 g of PP and moulded to give a polymer substrate with a thickness
of 0.5 mm. The polymer substrate had a contact angle to water of 145
degrees and to hexadecane of 110 degrees.(Dwg.0/4)

CN - 9433-E0201-U

IW - SURFACE MODIFIED POLYMER COMPOSITION HIGH WATER REPEL COMPOSE
POLYMER

MATRIX RESIN FILL SURFACE COVER FLUOROCARBON CHEMICAL ABSORB MEMBRANE

**IKW - SURFACE MODIFIED POLYMER COMPOSITION HIGH WATER REPEL COMPOSE
POLYMER**

MATRIX RESIN FILL SURFACE COVER FLUOROCARBON CHEMICAL ABSORB MEMBRANE

NC - 001

OPD - 1993-01-07

ORD - 1994-07-19

PAW - (MATU) MATSUSHITA DENKI SANGYO KK

TI - Surface-modified polymer compsn. with high water repellency - composed
of a polymer matrix resin and a filler, the surface of which is
covered with a fluorocarbon chemically absorbing membrane

A01 - [001] 017 ; R00964 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D83 ;

H0000 ; H0011-R ; S9999 S1434 ; P1150 ; P1343 ;

- [002] 017 ; ND00 ; B9999 B3509 B3485 B3372 ; K9449 ; K9892 ;

B9999 B3496 B3485 B3372 ; N9999 N6440-R ; B9999 B5390 B5276 ;

- [003] 017 ; D00 G2915-R F20 Fe 8B Tr O- 6A ; R01544 D00 F20 Al 3A O-

6A ; R05099 D00 D09 Cu 1B Tr ; R01694 D00 F20 O- 6A Si 4A ; R06013

G3270 D00 F20 O- 6A Sn 4A ; R01966 D00 F20 Ti 4B Tr O- 6A ; A999

A237 ; A999 A771 ; S9999 S1456-R ; B9999 B5209 B5185 B4740 ;

- [004] 017 ; A999 A237 ; A999 A771 ; S9999 S1683 ; A999 A419 ;

- [005] 017 ; G2891 D00 Si 4A ; S9999 S1070-R ; A999 A419 ; A999

A771 ;

- [006] 017 ; D11 D10 D69 F- 7A D01 D50 D93 F86 F85 Si 4A Cl ; A999

A453 A420 ; B9999 B3383-R B3372 ; A999 A431 A420 ; A999 A760 ;

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